

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-31. (Cancelled)

32. (New) A pharmaceutical preparation for tolerization, comprising a pharmaceutically acceptable carrier and an amount of an isolated human polypeptide effective for tolerizing an individual to an autoantigen, wherein:

said human polypeptide consists of an amino acid sequence, wherein said amino acid sequence defines a sequence motif containing core MHC binding residues, and is based upon the structure of the binding pocket of an HLA-DR protein, which HLA-DR protein is selected from the group consisting of HLA-DR2 and HLA-DR4, and is associated with a human autoimmune disease selected from Pemphigus Vulgaris (PV) or Multiple Sclerosis (MS);

wherein said human polypeptide binds said HLA-DR protein, and activates autoreactive T cells from a subject having said autoimmune disease; and,

wherein said human polypeptide is a non-myelin basic protein polypeptide.

33. (New) The pharmaceutical preparation of claim 32, wherein said HLA-DR protein is an HLA-DR4 protein and said autoimmune disease is pemphigus vulgaris.

34. (New) The pharmaceutical preparation of claim 33, wherein said sequence motif comprises PV motif #1 (SEQ ID NO: 21).

35. (New) The pharmaceutical preparation of claim 33, wherein said polypeptide consists of an amino acid sequence selected from SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, or SEQ ID NO: 7.

36. (New) A method of tolerizing an individual to an autoantigen of pemphigus vulgaris comprising administering an effective amount of the pharmaceutical preparation of any one of claims 33-35 to a subject in need of such treatment.

37. (New) The pharmaceutical preparation of claim 32, wherein said HLA-DR protein is DRB1*0402, and said autoimmune disease is pemphigus vulgaris.

38. (New) The pharmaceutical preparation of claim 32, wherein said HLA-DR protein is DRB1*1501, and said autoimmune disease is multiple sclerosis.
39. (New) The pharmaceutical preparation of claim 32, wherein said sequence motif comprises SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, or SEQ ID NO: 21.
40. (New) The pharmaceutical preparation of claim 33, wherein said polypeptide consists of an amino acid sequence selected from SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, or SEQ ID NO: 7.
41. (New) A pharmaceutical preparation for tolerization, comprising a pharmaceutically acceptable carrier and an amount of an isolated human pathogen polypeptide effective for tolerizing an individual to said human pathogen polypeptide, wherein:

said human pathogen polypeptide consists of an amino acid sequence, wherein said amino acid sequence defines a sequence motif containing core MHC binding residues, and is based upon the structure of the binding pocket of an HLA-DR protein, which HLA-DR protein is selected from the group consisting of HLA-DR2 and HLA-DR4, and is associated with a human autoimmune disease selected from Pemphigus Vulgaris (PV) or Multiple Sclerosis (MS); and,

wherein said human pathogen polypeptide binds said HLA-DR protein, and activates autoreactive T cells from a subject having said autoimmune disease.
42. (New) The pharmaceutical preparation of claim 41, wherein said HLA-DR protein is an HLA-DR4 protein and said autoimmune disease is pemphigus vulgaris.